

Wednesday April 17, 2019

8:30	Registration and coffee			
9:00	Keynote	Plenary lecture hall - Chair J. Duffou Numerical modelling issues and strategies on sheet metal forming simulation <i>R. Sousa</i>		
		Session 1	Session 2	Session 3
		Room A	Room B	Room C
		Bending - Chair V. Vorkov	Deep drawing - Chair W. Volk	Manufacturing systems - Chair J.-P. Kruth
9:30	Parallel sessions	20 Enhanced springback prediction for bending of high-strength spring steel using material data from an inverse modelling approach <i>Mertin, Chris; Stellmacher, Thomas; Hirt, Gerhard; Schmitz, Roman</i>	25 Investigation on friction behaviour of deep drawing radii using volatile media as lubricant substitutes <i>Reichardt, Gerd; Liewald, Mathias</i>	74 Nesting in the sheet metal industry: dealing with constraints of flatbed laser-cutting machines <i>Struckmeier, Frederick; Puente León, Fernando</i>
10:00	Parallel sessions	21 Physics of large radius bending <i>Aerens, Richard; Vorkov, Vitalii; Duffou, Joost R.</i>	26 Experimental investigation of tool-sided surface modifications for dry deep drawing processes at the tool radii area <i>Krachenfels, Kim; Rothhammer, Benedict; Tremmel, Stephan; Merklein, Marion</i>	75 Data quality assessment for improved decision-making: a methodology for small and medium-sized enterprises <i>Günther, Lisa Charlotte; Colangelo, Eduardo; Wiendahl, Hans-Hermann; Bauer, Christian</i>
10:30	Parallel sessions	22 On the forming mechanisms of frictionally engaged linear processes under consideration of incremental swivel bending (ISB) <i>Frohn, Peter; Borchmann, Linda; Engel, Bernd</i>	27 Influence of binder pressure zones on the robustness of restraining forces in sheet metal forming <i>Leocata, Salvatore; Senner, Thomas; Saubiez, Jean Marc; Brosius, Alexander</i>	Smart clamping system for machining and processing (Industrial Communication) <i>Bey-Temsamani, Abdellatif</i>
11:00	Coffee break			
		Bending/Hot stamping - Chair J.-P. Kruth	Deep drawing/Presses and tools - Chair W. Volk	Modelling - Chair S. Münstermann
11:30	Parallel sessions	23 Data-driven prediction of air bending <i>Vorkov, Vitalii; Tomás García, Alberto; Costa Rodrigues, Gonçalo; Duffou, Joost R.</i>	28 New process design for reduction of springback by forming with alternating blank draw-in <i>Radonjic, Ranko; Liewald, Mathias</i>	65 Surface roughness influences on localization and damage during forming of DP1000 sheet steel <i>Münstermann, Sebastian; Wechsuanmanee, Peerapon; Liu, Wenqi; Lian, Junhe</i>
12:00	Parallel sessions	24 Predetermination of the Springback taking in account the elasticity modulus variation <i>Aerens, Richard; Vorkov, Vitalii; Duffou, Joost R.</i>	30 Sheet metal bending with flexible tools <i>Zaragoza, Veronica Geraldine; Strano, Matteo; Iorio, Lorenzo; Monno, Michele</i>	66 Friction in Sheet Metal Forming: Influence of surface roughness and strain rate on sheet metal forming simulation results <i>Sigvant, Mats; Pilthammer, Johan; Hol, Johan; Wiebenga, Jan Harmen; Chezan, Toni; Carleer, Bart; van den Boogaard, Ton</i>
12:30	Parallel sessions	29 Removal of thin oxide scale by ultrasonic cleaning with diluted hydrochloric acid in hot stamping of bare 22MnB5 sheet using resistance heating <i>Maeno, Tomoyoshi; Mori, Ken-ichiro; Ogihara, Tomoki; Fujita, Tomohiro</i>	31 Closed-loop Control of Eccentric Presses based on inverse kinematic models <i>Hoppe, Florian; Pihan, Clemens; Groche, Peter</i>	67 Load path modelling in single-step deep drawing of rotationally symmetric cups <i>Nick, Matthias; Mannens, Robby; Trauth, Daniel; Bergs, Thomas</i>
13:00	Parallel sessions	Optical Metrology in Sheet Metal Hot Forming Processes (Industrial Communication) <i>Cuypers, Wim</i>		69 An Analytic Solution for Bending Under Tension of a Two-Layer Strip of Strain Hardening Materials <i>Alexandrov, Sergey</i>
13:30	Lunch			
		Surface conditioning - Chair J. Jeswiet	Presses and press tools - Chair W. Volk	
14:30	Parallel sessions	77 Investigation of different surface treatment parameters in the context of roll bonding processes <i>Schödel, Sandra; Herrmann, Jürgen; Merklein, Marion</i>	32 Research regarding multi-channel sheet hydroforming <i>Paunoiu, Viorel; Teodor, Virgil; Baroiu, Nicusor; Maier, Catalina</i>	
15:00	Parallel sessions	78 Surface structuring using multi-stage grinding strategies based on geometric physically-based process simulations <i>Siebrecht, Tobias; Potthoff, Nils; Wiederkehr, Petra; Biermann, Dirk</i>	33 Process Monitoring And Real Time Algorithmic For Hot Stamping Lines <i>Vollmer, Robert; Palm, Christian</i>	

Monday April 15, 2019

8:30	Registration and coffee		
9:30	Opening session	Plenary lecture hall - Chair J. Dufloy	
10:00	Keynote	Novel laser technology opportunities in processing sheet metal <i>M. Schmidt</i>	
10:30	Keynote	Bending XXL <i>S. Lucas</i>	
11:00	Coffee break		
		Session 1	Session 2
		Room A	Room B
		ISF - Chair H. Hagenah	Joining - Chair L. Fratini
			Materials - Chair P. Martins
11:30	Parallel sessions	1 Knowledge-based Incremental Sheet Free-forming Using Probabilistic Density Functions and Voronoi Partitioning <i>Hartmann, Christoph; Volk, Wolfram</i>	34 Increasing flexibility of self-pierce riveting using numerical and statistical methods <i>Falk, Tobias; Jäckel, Mathias</i>
12:00	Parallel sessions	2 Experimental Investigation and Finite Element Modelling of residual stress control in Disc Springs made of Metastable Austenitic Stainless Steel (MASS) using Incremental Sheet Forming (ISF) <i>Maqbool, Fawad; Bambach, Markus</i>	35 Process development for self-pierce riveting with solid formable rivet of boron steel in multi-material design <i>Grimm, Thomas; Drossel, Welf-Guntram</i>
12:30	Parallel sessions	3 Heat Supported Single Point Incremental Forming of Hybrid Laminates for Orthopedic Applications <i>Al-Obaidi, Amar; Graf, Alexander; Kräusel, Verena; Landgrabe, Dirk</i>	36 Numerical Simulation of high-speed joining of sheet metal structures <i>Meschut, Gerson; Gerkens, Michael</i>
13:00	Lunch		
		ISF - Chair G. Ambrogio	Joining - Chair L. Fratini
			Materials - Chair J. Jeswiet
14:30	Parallel sessions	4 Multi-step incremental forming using local feature based toolpaths <i>Carette, Yannick; Vanhove, Hans; Dufloy, Joost R.</i>	37 Joining by forming of lightweight sandwich composite panels <i>Martins, Paulo</i>
15:00	Parallel sessions	5 Evaluation and simulation on deformation instability mechanism in laminated sheet incremental forming <i>Wu, Renhao; Li, Meng; Hu, Qi; Cai, Sheng; Wang, Zhiheng; Chen*, Jun</i>	38 Combined deep drawing and fusion bonding of structural FRP-metal hybrid parts <i>Micke-Camuz, Moritz; Lippky, Kristian; Hübner, Sven; Sven, Hartwig; Klaus, Dilger; Bernd-Arno, Behrens; Lukas, Kaempf</i>
15:30	Parallel sessions	6 The numerical method for predicting failure in single point incremental forming using a new anisotropic ductile fracture model <i>Zhan, Xuepeng; Hu, Qi; Wang, Zhiheng; Cai, Sheng; Chen, Jun</i>	39 A Comparison of Resistance Spot Weld Quality Assessment Techniques <i>Summerville, Cameron; Compston, Paul; Doolan, Matthew</i>
16:00	Parallel sessions	7 Influence of Tool Path Strategies on the Residual Stress Development in Single Point Incremental Forming <i>Maaß, Fabian; Hahn, Marlon; Dobecki, Mateus; Brömmelhoff, Katrin; Tekkaya, Erman; Reimers, Walter</i>	40 Investigation of the effects of femtosecond laser metal surface texturing on bonding of PA6 to steel <i>Zinnecker, Victoria; Stokes-Griffin, Christopher; Madden, Steve; Rode, Andrei; Compston, Paul</i>
16:30	Coffee break		
17:00	Transport from conference venue to Inbev site		
17:30	Inbev visit + reception		

Tuesday April 16, 2019

8:30 Registration and coffee				
Plenary lecture hall - Chair J. Duffou				
9:00	Keynote	Prediction and validation of forming limits in sheet metal forming with non-proportional load histories <i>W. Volk</i>		
9:30	Keynote	New trends in coin minting <i>P. Martins</i>		
		Session 1 Room A	Session 2 Room B	Session 3 Room C
		ISF - R. de Sousa	Quality and Reliability - Chair H. Hagenah	Materials - Chair V. Gautam
10:00	Parallel sessions	8 Experimental and finite element investigation of over-bending phenomenon in double-sided incremental forming (DSIF) of Aluminium sheets <i>Heng, Wenxuan; Li, Meng; Li, Bin; Jun, Chen; Becker, Adib; Ou, Hengan</i>	76 Sensitivity analysis of the rotary draw bending process as a database of digital equipping support <i>Borchmann, Luda; Kuhnhen, Christopher; Frohn, Peter; Engel, Bernd</i>	56 Analysis of mechanical behaviour of AA6062-T6 sheets deformed at low temperatures <i>Bruschi, Stefania; Bertolini, Kachele; Ghiotti, Andrea; Simonetto, Enrico</i>
10:30	Parallel sessions	9 Automated parameterization of local support at every toolpath point in robot-based incremental sheet forming <i>Störkle, Denis; Altmann, Peter; Möllensiepe, Dennis; Thyssen, Lars; Kuhlentötter, Bernd</i>	Systematic errors in phase fraction measurements due to crystallographic texture (Industrial Communication) <i>Cruziger, Adam; Calhoun, Christopher; Polling, Whitney; Gnaeupel-Herold, Thomas</i>	57 Experimental and Numerical Characterisation Method for Forming Behaviour of Thermoplastics Reinforced with Woven Fabrics <i>Wester, Hendrik; Chugreev, Alexander; Behrens, Bernd-Arno</i>
11:00 Coffee break				
		ISF - R. de Sousa	Joining - Chair G. Meschut	Materials - Chair M. Merklein
11:30	Parallel sessions	10 An explorative study on the influence of an elliptical tool on incremental forming <i>Vanhove, Hans; Carette, Yannick; Duffou, Joost R.</i>	41 Steel-CF/PAG hybrids manufactured by a laser tape placement process: Effect of first-ply placement rate on lap shear strength for garnet blasted substrates <i>Stokes-Griffin, Christopher; Kollmannsberger, Andreas; Compston, Paul; Drechsler, Klaus</i>	58 Stress-state dependant fracture characterisation and modelling of AZ31 magnesium sheet alloy at elevated temperatures <i>Behrens, Bernd-Arno; Chugreev, Alexander; Dykiert, Matthäus</i>
12:00	Parallel sessions	11 SPIF of tailored sheets to optimize thickness distribution along the shaped wall <i>Amoroso, Giuseppe; Casigliaro, Francesco; Serratore, Giuseppe; Ramundo, Ernesto; Filice, Luigino</i>	42 Qualifying Shear Load Test for Resistance Element Welding with Uset Steel-Elements Specimen <i>Meinhardt, Mario; Endres, Martin; Graf, Michael; Lechner, Michael; Merklein, Marian</i>	59 Damage characterization on heterogeneous tensile tests <i>Küsters, Niklas; Brosius, Alexander</i>
12:30	Parallel sessions	12 Improving the Accuracy of Double-Sided Incremental Forming Simulations by Considering Kinematic Hardening and Machine Compliance <i>Leem, Dohyun; Moser, Newell H.; Ren, Huang; Mozaffar, Mojtaba; Ehmman, Kornel F.; Cao, Jian</i>	43 Assessing the field shaper material influence on magnetic pulse welded interface of Al/Cu joints <i>Li, Jishuai; Raelison, Rija; Sapanathan, Thaneshan; Rachik, Mohamed</i>	60 Approach for Modelling the Taylor-Quinney Coefficient of High Strength Steels <i>Behrens, Bernd-Arno; Chugreev, Alexander; Bohne, Florian; Lorenz, Ralf</i>
13:00 Lunch				
		ISF - Chair J. Duffou	Cutting - Chair A. Wetzig	Materials - Chair M. Merklein
14:00	Parallel sessions	13 Prediction of cracks within cones processed by single point incremental forming <i>Betaieb, Ehsen; Yuna, Sibo; Guzman, Carlos Felipe; Duchene, Laurent; Habraken, Anne</i>	Experimental and numerical investigations of Al/Cu intermetallic layer resulting from magnetic pulse welding (Industrial Communication) <i>Li, Jishuai; Raelison, Rija-nirina; Sapanathan, Thaneshan; Rachik, Mohamed</i>	61 Experimental and Numerical Studies on Formability of Tailor Welded Blanks of High Strength Steel <i>Gautam, Vijay; Kumar, Arvind</i>
14:30	Parallel sessions	14 Incremental sheet metal forming on the example of car exterior skin parts <i>Scheffler, Sören; Pierer, Alexander; Scholz, Peter; Melzer, Sebastian; Weise, Dieter; Rambousek, Zdeněk</i>	44 Warm and cold blanking of manganese-boron steel 22MnB5 with different tool geometries <i>Neumayer, Franz Ferdinand; Vogt, Simon; Gueffroy, Marc; Jesner, Gerhard; Kelsch, Reiner; Geile, Marc; Sommer, Andreas; Golle, Roland; Volk, Wolfram</i>	62 Thermo-mechanical forming procedure of high strength Aluminum sheet with improved mechanical properties and process efficiency <i>Scharif, Emad; Knoth, Ruben; Weidig, Ursula</i>
15:00	Parallel sessions	15 Microstructure and Strains in Single Point Incremental Forming <i>Gupta, Pranav; Jeswiet, Jacob</i>	45 Realization of sheet metal heating for semi-hot fine blanking <i>Weiser, Ingo Felix; Mannens, Robby; Feuerhack, Andreas; Trauth, Daniel; Bergs, Thomas</i>	63 Temperature-based determination of the onset of yielding using a new clip-on device for tensile tests <i>Vitzthum, Simon Josef; Hartmann, Christoph; Eder, Matthias; Volk, Wolfram</i>
15:30	Parallel sessions	16 The Effect of Process Parameters on Forming Forces in Single Point Incremental Forming <i>Dwivedy, Maheshwar; Kalluri, Vinayak</i>	Thin sheet metal forming processes engineering: a food packaging industrial case study (Industrial Communication) <i>Campanella, Davide; Buffa, Gianluca; Di Lorenzo, Rosa; Ingarao, Giuseppe; Gucciardi, Marco; Marimano, Giuseppe; Masnata, Attilio; Salerno, Giorgio; Fratini, Livan</i>	64 The deformation behavior of steel SPHC during ferrite rolling in CSP process <i>Liu, Yazheng; Hu, Xuewen; He, Guoning; Jiang, Bo; Zhang, Chaolet</i>
16:00 Coffee break				
		ISF-spinning / Modelling - Chair J. Jeswiet	Laser Cutting - Chair A. Wetzig	Manufacturing Systems - Chair G. Ingarao
16:30	Parallel sessions	17 Haptic metal spinning <i>Russo, Jacopo M.; Cleaver, Christopher J.; Allwood, Julian M.</i>	47 Fast Laser Cutting of Thin Sheet Metal <i>Wetzig, Andreas; Herwig, Patrick; Hauptmann, Jan; Baumann, Robert; Rauscher, Peter; Schlosser, Michael; Pinder, Thomas; Leyens, Christoph; Beyer, Eckhard</i>	70 On course to smart large-diameter pipe production <i>Thorne, Mario; Zeller, Susanne</i>
17:00	Parallel sessions	18 Processing maps for wrinkling free and quality enhanced parts by shear spinning <i>Childerhouse, Thomas; Long, Hui</i>	48 Diagnostics for laser cutting efficiency using computational fluid dynamic <i>Christophe, Julien</i>	71 New compensation strategy for hang on part assemblies <i>Schuler, Felix; Liewald, Mathias; Marques Bezerra, Diego</i>
17:30	Parallel sessions	19 An investigation of mandrel-free spinning <i>Jawale, Kishore; Loukaides, Evripides G.</i>	49 Thickness validation of modeling tools for laser cutting applications <i>Costa Rodrigues, Gonçalo; Levichev, Nikita; Vorkov, Vitalii; Duffou, Joost R.</i>	72 Aluminum sheet metal scraps recycling through friction consolidation <i>Barran, Lirio; Butta, Gianluca; Ingarao, Giuseppe; Masnata, Attilio; Fratini, Livan</i>
18:00	Parallel sessions	68 Formability Prediction of Advanced High-Strength Steel Sheets by Means of Combined Experimental and Numerical Approaches <i>Panich, Sansot; Chongbunwatana, Komkamol; Kamonrattanasudi, Maitri</i>	Overcoming common issues with solid state laser cutting (Industrial Communication) <i>Wood, Matt</i>	73 Software Development for Cutting Tool Routing Problems <i>Makarovskikh, Tatiana; Panyukov, Anatoly; Savitskiy, Igor</i>
19:00	Bus to conference dinner leaving from conference venue			